Test Our Java Skills

this.author = "Santhosh Kiran J"

What is the output of following program?

```java
public class BitPuzzel {

  public static void main(String[] args) {

    int mask = 0x000F; int value = 0x2222;

    System.out.println(value & mask);

  }

}
```

Ans: 2

What is the output of following program?

```java
class A {
  int add(int i, int j) {
    return i + j;
  }
}
public class B extends A {
    public static void main(String[] args) {
        short s = 9;
        System.out.println(add(s, 6));
    }
}
```

Ans: Compilation Fails due to error at line 9, non-**static** method referenced from a **static** context

Which is the right answer to the following?

```java
public interface Syrupable {
    void getSugary();
}
abstract class Pancake implements Syrupable { }
class BuleBerryPancake implements Pancake {
    public void getSugary() { ; }
}
class SourdoughBuleBerryPancake extends BuleBerryPancake {
    void getSugary(int s) { ; }
}
```

Answer: Compilation fails due to an error on line 6

What is the output of following program?

```java
try {
    Float f = new Float("3.0");
    int x = f.intValue(); System.out.println("x : "+x);
    byte b = f.byteValue(); System.out.println("b : "+b);
    double d = f.doubleValue(); System.out.println("d : "+d);
    System.out.println(x + b + d);
} catch (NumberFormatException e) /* Line 9 */ {
        System.out.println("bad number"); /* Line 11 */
}
```

Answer: 9.0

Write a Java Program for the below given problem statement

Problem: Given the input strings validate if they have balanced parentheses and curly braces.

```java
import java.util.Scanner;
class Parser {
        boolean isBalanced(String s) {
                while (s.length() != (s = s.replaceAll("\\(\\)|\\{\\}", "")).length());
                return s.isEmpty();
        }
}
class Solution {
        public static void main(String[] args) {
                Parser parser = new Parser();
                Scanner in = new Scanner(System.in);
                while (in.hasNext()) {
                        System.out.println(parser.isBalanced(in.next()));
                }                in.close();
        }
}
```

Implement a Java class for the below:

abstract class Calculator { abstract int add(int a, int b); }


```
class Adder extends Calculator{
        int add(int a, int b) {
                return a+b;
        }
}
public class Solution {
        public static void main(String[] args) {
                int a, b;
                try (Scanner scan = new Scanner(System.in)) {
                        a = scan.nextInt();
                        b = scan.nextInt();
                }
                Calculator adderObject = new Adder();
                System.out.println("The sum is: " + adderObject.add(a, b));
        }
}
```

Given the following code, what will be the output?

```java
public class MyClass {
    public static void main(String[] args) {
        int x = 10;
        int y = 20;
        System.out.println(x + y + " " + x++ + " " + y--);
    }
}
```

Explanation:

* The expression x + y is evaluated first, resulting in 30.

* Then, x++ is evaluated, which means the value of x is used first (10) and then incremented to 11.

* Finally, y-- is evaluated, which means the value of y is used first (20) and then decremented to 19.

Referenes

https://github.com/deepdalsania/HackerRank_Solutions

GitHub - MeAtharva/Java-Hackerrank-Certifications

https://segmentfault.com/t/java

https://github.com/sunilshinde159/fundamentals/blob/master/QUESTIONS_AND_ANSWERS_02.md